



Chapter Three

INTERMODAL SYSTEM TRENDS And ISSUES



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The Region's population growth in recent years has put increasing strains on its surface transportation network and has stimulated major planning for the future enhancement of that network. That existing network consists of the following major elements:

- Approximately 4,000 lane-miles of freeways, parkways, and major and minor arterials.
- More than 100 miles of railroad tracks and numerous intermodal transfer facilities providing passenger and freight transportation within and through the region.
- A major urban transit system in the Tucson area along with several rural transportation systems scattered throughout the County, providing transportation services to a diverse population.
- A 488-mile network of bikeways allowing bicycle and pedestrian travel over long distances.
- More than 45 trucking firms providing freight transfer facilities, along with air cargo facilities, at the Region's major airport, Tucson International Airport (TIA).

These elements combine to form an intermodal transportation system that will undergo increasing demands for expanded service and maintenance as the area's population continues to increase in the future.

The following sections provide discussion on the existing and future PAG intermodal system as it relates to the RASP airports. An overview of existing and future intermodal facilities, including the Puerto Nuevo intermodal facility currently being planned, is provided. An overview of the alternate modes that provide service within the PAG Region and to the RASP airports is also provided. Overviews of freight facilities and operations within the PAG Region, an overview of the 1998 update to the Pima Association of Governments Regional Transportation Plan, and a summary of intermodal trends as they relate to the RASP airports are also provided.

Intermodalism

Overview

The Transportation Equity Act for the 21st Century (TEA-21) was enacted June 9, 1998, as Public Law 105-178. TEA-21 authorizes Federal surface transportation programs for highways, highway safety, and transit for the six-year period from 1998 to 2003. The TEA-21 Restoration Act, enacted July 22, 1998, provided technical corrections to the original law. TEA-21 is an update to the Intermodal Surface Transportation Efficiency Act of 1991 (known as “ISTEA”), which is considered by many to be the most significant transportation-related legislation approved by the U.S. Congress in the last decade.

TEA-21 creates a framework for increased funding for transportation programs (through innovative “flexible funding” techniques), and places a major emphasis on “intermodalism” in the future development of the country’s transportation network. An intermodal facility is a transportation element that accommodates and interconnects different modes of transportation. Intermodal facilities include highways, ports, canals, pipelines, airports, rail/truck terminals, intercity bus terminals, public transit facilities, and other facilities that serve the diverse needs of intrastate, interstate, and international movement of goods and people. Intermodal planning typically emphasizes the following:

- Connections – To support the transfer of goods and people among modes of transportation in the most cost-effective and efficient manner possible
- Choices – To give the widest possible range of transportation options for the movement of people and goods
- Coordination and Cooperation – To ensure that intermodal facilities planning is integrated into other state and regional transportation planning activities

Intermodal planning typically involves planning, funding, and implementation in the context of a larger network of interdependent transportation elements. The underlying assumption is that, when combined, the various transportation elements can help increase transportation opportunities for all citizens by providing more transfer opportunities and convenient access to differing modes of transportation.

For example, in many cases in the past, a person living in an isolated rural area may have had access to a rural public transit system that only provided transportation to an urban medical or shopping area. The provision of an appropriate intermodal system might instead afford that person access to a wide range of transportation options. Instead of a round trip merely to a medical or shopping center, that rural citizen should be able to have access to an urban transfer center that, through a coordinated scheduling process, would provide convenient access to an urban transit system, an intercity bus system such as Greyhound, an Amtrak station, or a major airport.

Another aspect of intermodalism is the efficient movement of goods. With the trade opportunities offered by the advent of the North American Free Trade Agreement (NAFTA), the movement of commodities through and within an area, such as the PAG Region, is an important aspect of the area’s economy and will be increasingly so in the future. In an era of increased competition and burgeoning economic

development, especially in international border areas, freight companies will be looking for the most efficient means possible of moving their goods. This will increase the emphasis on providing efficient, timely, and economical transfers of goods between and among different modes of transport including truck, rail, and airplane to allow companies and nations to maintain their competitive edge.

With that context in mind, it is important that PAG's intermodal transportation network is viewed as a part of a larger, interrelated nationwide system that provides convenient and coordinated transportation opportunities to its people and commodities. The performance and capabilities of the Region's surface transportation network will have a major impact in years to come on the area's air transportation system and its future needs.

Existing Intermodal Systems

As indicated in the 1995 PAG Intermodal Management System (IMS) Study, intermodal linkages are generally available between the various passenger modes such as automobile/bus and bus/air, but there are limited intermodal connections for the freight modes. Specifically, there are no rail/pipeline, air/pipeline, or rail/air connections in the Study area. As defined in this PAG Study, the following are identified as intermodal facilities along with the roadways serving these facilities:

- Truck terminals having an excess of 10 trucks per day in a concentrated area of approximately one-half of a square mile
- Union Pacific Line's truck/rail connections
- Commercial Ports of Entry at Nogales (Mariposa Road), Lukeville, and Sasabe
- Amtrak rail passenger station
- Tucson International Airport cargo facilities
- Tucson International Airport passenger terminal
- Pipeline tank farm
- Intercity Bus Terminals

The IMS includes the cargo handling airport (TIA) and the three commercial ports of entry with Mexico. The other cargo components of the system include large truck terminals as defined above, including those intermodal connections with rail and pipeline. The passenger components include access to the Amtrak train station, Tucson International Airport, and park and ride lots.

Future Intermodal Systems

According to the IMS, the future transportation system is expected to be similar to today's transportation system with the following exceptions:

- New technology is expected to be introduced into the system to make it more efficient and "user friendly".

- More extensive public transit service is expected throughout the Metropolitan Area, particularly along the Broadway and Oracle corridors.
- New roadway capacity is expected in some locations, notably I-10, Tangerine Road, and Sahuarita Road.
- Private sector investments in new technology are expected; these may influence distribution (vehicles, goods handling devices, communications, etc.).

The factors driving future demand for the IMS include the following:

- People – The PAG Region will grow from about 750,000 people in 1995 to about 1,110,000 people in 2020, a growth of about 65 percent.
- Jobs – Employment in the PAG Region will grow from about 377,500 in 1995 to about 740,700 in 2020, a growth of about 96 percent.
- Travel by people – The demographic, economic, and geographic trends forecasted for the Tucson Metropolitan Area indicate a substantial increase in travel demand over the next 25 years, from almost 16 million daily vehicle miles of travel in 1995 to nearly 34 million in 2020.
- Movement of goods – NAFTA is expected to result in long-term increases (in excess of 16 percent) of U.S. trade in a number of industrial sectors including autos and automotive parts, computers and electronics, and textiles and apparel, according to a study prepared for the House Ways and Means Committee in 1992.

According to the IMS review of the various types of existing intermodal services and connections, truck-to-rail and truck-to-air linkages have a longer-term need for improvement. Furthermore the IMS identified truck connections with rail and air service as being one of the top potential priorities for improvement. In the longer term, increased and improved rail service may evolve from changes in technology and public policy. However, in the near term, it is likely that trucks will continue to carry much of the cross-border products and other goods destined to, or passing through, the PAG Region. Simplification of border crossing inspections and potential consideration of more productive train marshaling yards could influence the degree of dependence on truck and rail modes.

The PAG IMS identified two potential locations for a new truck/rail facility. These locations are along the Union Pacific Branch Line and could include a facility adjacent to Tucson International Airport or anywhere along Union Pacific's Mainline. The PAG IMS recommends that the following features be integrated into the future IMS:

- Additional highway, rail, airport, and intermodal terminal capacity
- A focus on elimination of bottlenecks

- Ability to identify and adapt to changing conditions
- An assessment of potential implications, benefits, and costs of the following: technological change and innovation; change in facility ownership and operation (e.g., DMAFB and/or Pacific Fruit Express); changes in border area practices; and changes in national and regional economic conditions and priorities
- Partnership of public/private entities for cooperatively addressing deficiencies in the system and coordinating plans and actions

Puerto Nuevo

Research conducted in 1998 and 1999 as part of the Tucson-Mexico Project, an initiative by the City of Tucson, indicated the need for Tucson to promote itself as an international trade and distribution center. This finding, supported by independent research by the Tucson Airport Authority, resulted in the concept for "Puerto Nuevo". The goal of Puerto Nuevo is to develop a multi-dimensional inland port to serve Mexico, the United States, and the global marketplace. The integrated components of Puerto Nuevo include the following:

- Multimodal Transportation Infrastructure
- Cargo Consolidation, Warehousing, and Distribution
- Manufacturing
- High-Tech Research and Development
- International Business and Support Services

Transportation and intermodal facilities that have been developed, or that are being planned as a part of Puerto Nuevo, include the following:

- Century Park Research Center – This industrial development includes 1.2 million square feet of manufacturing and warehouse space. Located near South Kolb Road and Interstate 10, this development offers intermodal access to and between the Union Pacific Railroad, Tucson International Airport, and I-10. As a Foreign Trade Zone, the development offers international trade incentives and a distribution center for regional and international shipments by highway, rail, and air.
- Union Pacific Rail – In 2001, approximately 85 trains per day moved through Puerto Nuevo. Union Pacific plans include the construction of switches and spur lines to connect with the Century Park Research Center. Plans also include the development of a rail/truck intermodal transfer facility to replace the Union Pacific intermodal facility that was closed in 1999.
- Tucson International Airport – Located in the immediate vicinity of Tucson International Airport, Puerto Nuevo offers access and intermodal linkages with airfreight distribution. Carga Express has recently established international airfreight service between Tucson and Hermosillo, Sonora. Service area expansion to Guymas and other cities in Mexico is planned.
- I-10 and I-19 – Puerto Nuevo, located in the vicinity of Tucson International Airport, offers access to both I-10 and I-19. I-10 offers a preferred good-weather east-west route, while I-19 provides direct access to Mexico through Nogales, Arizona. I-19 also provides access to and from

the busiest U.S./Mexico port of entry for fresh produce shipments, as well as maquiladora plants, located in northern Sonora Mexico.

While regional, national, and international multimodal accessibility and intermodal facilities are features of Puerto Nuevo, there is no local transportation system planned within the Puerto Nuevo development area. To ensure that the full potential of Puerto Nuevo is achieved, it is recommended that a sub-regional transportation study be conducted to develop and evaluate a Puerto Nuevo transportation system with linkages to the regional transportation network.

Alternate Modes

Several transportation modes were reviewed as part of the PAG RASP to evaluate the potential impact to the aviation system. These modes include the following: public transit, intercity bus, and passenger rail. These modes are discussed in the following sections.

Public Transit

The major components of public transit within the PAG RASP Region include Sun Tran, Van Tran, and Pima Rural Transit. Various other services provide specialized services and have smaller operations.

Sun Tran is the Tucson area's primary public transit provider. Owned and operated by the City of Tucson, Sun Tran utilizes 199 vehicles serving the City of Tucson, the City of South Tucson, and several urbanized areas of Pima County adjacent to the City of Tucson. As of August 21, 2001, Sun Tran provided 37 routes, of which 11 were express routes. Currently the system covers over 500 miles and has 2,500 bus stops.

Sun Tran operates three transit centers offering transfers between a number of routes: the Ronstadt Transit Center in downtown Tucson, the Roy Laos Transit Center between downtown and Tucson International Airport, and the Tohono Tadaí Transit Center near the Tucson Mall. There are currently six Park-and-Ride lots assisting travelers in making connections to transit or carpools: Golf Links and Kolb; Speedway and Harrison; Laos Transit Center; Ina Road and Via Ponte; vacant land within the Interstate 10 right-of-way at Cortaro Farms Road; Interstate 10 and Ruthrauff Road. Additional Park-and-Ride lots are currently being planned throughout the Metropolitan Area. Sun Tran riders typically utilize city-owned park-and-ride lots for access to express routes. Other major transfer points include the University of Arizona north of downtown, El Con Mall northeast of downtown, Park Mall in the eastern part of the area, and numerous other activity centers throughout the City. The Ronstadt Transit Center is centrally located in downtown near the Union Pacific Depot and the Greyhound bus terminal and is located adjacent to Sun Tran's downtown trolley route.

Sun Tran currently has connecting routes to the following two RASP airports: Tucson International Airport and Davis-Monthan Air Force Base. Two Sun Tran routes directly serve Tucson International Airport. Route 11 provides service to the airport terminal, with connections to north and west Tucson. Route 6 provides service to the terminal from the Roy Laos Transit Center. Davis-Monthan Air Force Base is served by Sun Tran Route 34, which provides cross-town connections to Park Mall on the east side and Tucson Mall on the north side.

Van Tran is Tucson's paratransit demand-response service that operates throughout the Tucson Metropolitan Area. Van Tran of Tucson is professionally managed by Laidlaw Transportation Services, Inc. on behalf of the City of Tucson. Van Tran's primary service area is currently within the greater Tucson Metropolitan Area, but also provides service to and from South Tucson by agreement with the City of South Tucson and portions of Pima County based on an intergovernmental agreement. Both the trip and trip destination must be within the ADA service area. The ADA service area is three-fourths of a mile around each Sun Tran Bus route, not the City limits. Van Tran provides approximately 310,000 passenger trips annually with a peak service fleet of 56 lift-equipped minibuses. Approximately 150,000 revenue hours and 280,000 payroll hours are expended annually.

Since November 1992, the Pima County Department of Transportation (PCDOT) has funded and administered rural public transit programs to provide transportation services to greater Pima County. Pima County contracts with A&K Transportation to operate the service. Within the PAG Region, Pima Rural Transit operates three separate transit route systems. These systems serve the Town of Marana (including parts of Avra Valley), Tucson Estates, and the San Xavier area. Additionally, intercity service is provided to Ajo by Pima Rural Transit. Three of these routes operate from the Roy Laos Transit Center in southern Tucson. Pima Rural Transit is a general public provider, but also meets ADA regulations and provides special service needs.

In addition, Pima County provides the Pima Transit Service, an advanced reservation dial-a-ride service for ADA eligible passengers who otherwise are unable to utilize existing public transit services in Pima County. The service area encompasses unincorporated Pima County and provides service to locations within the Tucson city limits. Trip purposes generally include medical, dental, and personal errand destinations for ADA passengers. Service trips usually cover several miles per individual. Handicar is the privately owned firm that operates the service under contract with Pima County.

The Town of Oro Valley provides Coyote Run, a paratransit system. The service is an advanced reservation dial-a-ride transit provider for transit-dependent and ADA-eligible passengers. The Town of Oro Valley manages and operates Coyote Run. The Coyote Run service area encompasses all of Oro Valley, with direct service destinations as far south as 22nd Street, as far east as Wilmot Road, and as far west as St. Mary's Hospital in metropolitan Tucson. The recent adoption of the Transit Services Element of the Town's General Plan in 1999 includes plans for a future expanded service to include a community circulator.

In the Green Valley area, Friends In Deed operate a private shuttle service that provides transit service. The transit service is operated through Community Transportation Volunteers. Services include transportation for errands, medical appointments, and other service destinations. The service is a dial-a-ride system providing door-to-door service with prior reservations. Service includes destinations in Green Valley and to the metropolitan Tucson area.

According to the PAG Intermediate Range Transit Plan: Technical Memorandum 1, there is an unmet transit need to Pinal Airpark. No other airports in the Regional System are identified in this document as having unmet transit needs. In addition, the increasing trend toward locating transit centers and other major transit transfer points outside of downtown Tucson indicates an increasing demand for non-radial routes, providing more intermodal opportunities for access to airports. Additionally, growth in the

rural transit market, especially in the Marana and southwest Tucson areas, provide potential intermodal opportunities for connections to airports.

Intercity Bus Service

The major provider of intercity bus service is Greyhound, whose major passenger loading point is at the Greyhound terminal in downtown Tucson, near the Depot. Additional “flag” stops are located throughout Pima County, providing minimal amounts of passenger boardings; the vast majority of Greyhound ridership connects with the system in downtown Tucson. Currently about 54 buses arrive each day and 53 depart.

Two other bus companies provide intercity bus service in Pima County: Golden State Transportation (a subsidiary of Greyhound) and Arizona Shuttle. Golden State Transportation operates a passenger bus service that provides intercity bus service from Tucson to Phoenix, Yuma, and Nogales with continuing service to major cities in Sonora, Mexico. Arizona Shuttle provides shuttle service to Sky Harbor Airport in Phoenix. The availability of the Arizona Shuttle service to Sky Harbor Airport in Phoenix is an obvious disincentive for use of Tucson International Airport.

The major transfer point for intercity bus riders continues to be downtown Tucson, and no trends are seen to locate terminals near area airports.

Passenger Rail Service

Amtrak provides long-distance intercity rail service to and through Tucson. The Amtrak Sunset Limited provides transcontinental service from Los Angeles to Orlando and has service through Tucson. It serves the SP Depot in downtown Tucson with three trains per week eastbound (on Mondays, Thursdays, and Saturdays) and three westbound (on Tuesdays, Thursdays, and Sundays). The only Amtrak station in Pima County is located at the Depot in downtown Tucson. Another station is located in Benson in Cochise County to the southeast.

In March 1998, ADOT completed a high-speed feasibility study to develop long-range transportation alternatives for the I-10 corridor between Phoenix and Tucson. The study evaluated six transportation alternatives, including no-build, interstate widening, two conventional rail upgrade alternatives, and two high-speed rail alternatives. The preferred alternative resulting from the study included a minor upgrade for conventional rail service as part of the initial improvement phase to be eventually converted to high-speed electric rail service by the end phase. Incremental improvements leading up to the end phase are to occur as ridership warrants and funding becomes available.

The 1994 ADOT State Rail Plan Update identifies the opportunity for providing a regional rail passenger system, which includes service between Phoenix and Tucson, and Tucson to Nogales. It is recognized that the Phoenix to Tucson connection could service business interests and the Tucson to Nogales line could provide tourism opportunities. Passenger rail has several potential implications to the Regional Aviation System. The implications of each service are as follows:

- Amtrak ridership from the Tucson area continues to increase, although that system's focus continues to be in downtown Tucson with no evident plans for intermediate stops in other parts of the Metropolitan Area. In addition, the Amtrak route through Tucson completely bypasses Tucson International Airport, though it does pass near Marana Northwest Regional Airport to the north.
- The proposed intercity rail system running from Phoenix to Nogales, represents advantages to the Regional Aviation System by providing tourists flying into Tucson International Airport with a convenient means to travel to Nogales and the Mexican border. It would also provide more intermodal transfer opportunities than the existing Amtrak service, especially in the northern parts of the Tucson area near Orange Grove (and potentially the airports in the Marana area). However, it could also increase passenger diversion for Tucson residents to Sky Harbor Airport in Phoenix.

Freight Transportation

There are two primary types of freight service that are used for the transportation of goods: surface freight and air freight. These two services are discussed below:

Surface Freight

Surface freight refers to goods that are moved on roadway and rail. Information prepared by Reebie and Associates in 1994 and presented in the prior PAG RASP and in the PAG IMS indicate that the large majority of intermodal freight facilities are located in the City of Tucson. Concentrations were identified near downtown Tucson and along the I-10/Union Pacific Corridor. In general, few facilities were located near System airports. According to the IMS, there were about 45 freight trucking firms in the PAG Region in 1995. Based on an informal survey, it was determined that many different types of freight were hauled and that typical facilities accommodated between 10 and 20 trucks per day.

According to PAG's 2025 Regional Transportation Plan (RTP), the Tucson Division of the Union Pacific Transportation Company provides freight rail service to 750 of the approximately 1,150 shippers in the State. The bulk of the Arizona goods moved by the Union Pacific Transportation Company are generated from mining and agricultural production. In addition, Tucson receives a considerable amount of consumer goods by rail. The freight rail routes passing through Tucson are the following:

- Points East to California – There are approximately 60 total freight trains per day on this route that pass through Tucson. Union Pacific expects this traffic will continue to grow. In addition to freight service, Amtrak also operates over this route.
- Tucson to Nogales – Freight trains link with the Mexican railroad system. Two to four trains operate daily on this route.

Surveys completed as part of the Tucson Intermodal Facility Potential Rail Use Study, prepared in 1998, indicated Tucson has only a limited base of intermodal rail users. This survey also indicated there is potential to increase the number of users and for the Tucson Intermodal Facility to become more active. However, these surveys also indicated there was a great deal of dissatisfaction with the Intermodal Rail

Service. Areas that need improvement include loading and unloading containers, certainty in departure and arrival times, and increased responsiveness of intermodal staff to needs of customers. Subsequent to the preparation of the Tucson Intermodal Facility Potential Rail Use Study, intermodal activities at this site were eliminated.

In 1998, a private businessperson began the development of a 264-acre Century Park Research Center located off Kolb Road north of Interstate 10 to include an intermodal facility called “The Port of Tucson”. This site has 193 acres in an active Foreign Trade Zone, and utilization of this zone may reduce or eliminate duties and taxes. Included as part of the Port of Tucson plan is a rail spur off of the Union Pacific line that would be designed for effective transfer of freight and container loading and unloading.

The absence of intermodal facilities near major airports in the Regional System presents opportunities for the creation of an intermodal freight transfer facility near airports located on rail corridors, especially Tucson International Airport and perhaps Marana Northwest Regional Airport.

Air Freight

Both Tucson International Airport and Davis-Monthan Air Force Base handle air freight. Air freight projections and statistics are provided in a separate section of the report. The Tucson area’s growing air freight market is focused on Tucson International Airport, with no plans for additional air freight facilities at other airports in the System.

Transportation Improvement Plans

Pima Association of Governments Regional Transportation Plan

The Pima Association of Governments Regional Transportation Plan, or RTP, provides a 25-year vision for a balanced, multimodal, sustainable transportation system for eastern Pima County. The planning horizon was extended in this plan update to 2025 in order to meet Federal statutes requiring a minimum 20-year planning horizon. This update includes adjustments to bring the 2025 RTP up-to-date with respect to existing and projected financial resources, project completions, and additional projects needed for the 2001-2005 time period. Because the 2025 RTP is based on the previously adopted plan, the plan goals and policies are essentially identical to the previous 1998-2020 plan.

The plan goals are to improve the mobility of people and goods; to protect the natural and built environments; to enhance the livability and sustainability of our communities; to assure financial feasibility of the plan; and to gain public support for the plan implementation.

Elements of the plan include the following:

- Significant non-capacity improvements utilizing Intelligent Transportation Systems.
- A substantial increase in transit service and facilities. The bus fleet is expected to double to 400 buses and the route-miles of service are planned to increase by almost 40 percent. New transit circulators are planned for the towns of Marana, Oro Valley, and the Sahuarita/Green Valley Area.

- Bikeway routes are anticipated to double the existing 488 miles to 976 miles within the next 10 years with a goal of reaching 1,163 miles by 2025.
- The pedestrian system planning goals are set out in the PAG Regional Pedestrian Plan and recommend a regional inventory and assessment of the pedestrian system.
- Support for the railroad system both in terms of passenger and freight service.
- Support for several travel demand programs including the Travel Reduction Program, the Rideshare Program, and the Clean Cities Program.

The future funded roadway improvements included within the Long Range Transportation Plan, but not included in the PAG Transportation Improvement Plan, that may benefit the RASP Airports include:

- Widen I-10 to eight lanes from I-19 to North County Line (ADOT)
- Widen I-19 to six lanes from Ajo Way to Valencia Road (ADOT)
- Widen SR 86 to 40 feet from Brawley Wash to Sells (ADOT)
- Widen Tangerine Road to four lanes from La Cholla to I-10 (ADOT)
- Construct paved shoulders along Sandario Road from Avra Valley Road to Town Limits (Marana)
- Widen Tangerine Road to four lanes from La Canada to La Cholla (Oro Valley)
- Improve access control along Old Nogales Highway (B-19) from MP 43.9 to MP 57.5 (Pima County)
- Widen La Cholla to four lanes and add bridge from Magee to Tangerine (Pima County)
- Widen 6th Avenue to three lanes from Valencia to Thoroughbred (City of Tucson)
- Widen Alvernon Way to six lanes from 22nd to Pima (City of Tucson)
- Widen Craycroft Road to six lanes from Broadway to Speedway (City of Tucson)
- Intersection improvements to the Golf Links/Craycroft intersection (City of Tucson)
- Intersection improvements to the Golf Links/Swan intersection (City of Tucson)
- Intersection improvements to the Golf Links/Wilmot intersection (City of Tucson)

The PAG Transportation Improvement Plan is discussed in the following section.

PAG Transportation Improvement Program

The Transportation Improvement Program (TIP), prepared by the Pima Association of Governments (PAG), is a five-year schedule and budget of proposed transportation improvements within eastern Pima County. The TIP is typically updated annually through a multi-step process in association with PAG's member jurisdictions and other implementing agencies. The TIP addresses regional transportation projects and programs including federal, state and local highways, transit, aviation, ride sharing, bikeways, and pedestrian facilities. The goal of the transportation improvement programming process is to develop a TIP that makes optimum use of available funds and resources to serve the region's transportation needs. All projects included in the TIP must be drawn from the RTP. Following is an overview of the projects included within the TIP that are anticipated to benefit the RASP airports:

- Reconstruct I-10/I-19 traffic interchange (ADOT)
- Reconstruct I-19/Valencia traffic interchange (ADOT)
- Construct sidewalks along SR 85 in Ajo (ADOT)

- Construct a pedestrian bridge at Sells Wash on SR 86 (ADOT)
- Construct sidewalks and bike lanes under I-10 overpass at Valencia Road (ADOT)
- Reconstruct Tangerine Road from Breakers Road to Thornydale (Marana)
- Widen Tangerine Road to four lanes from Oracle to La Canada (Oro Valley)
- Widen La Cholla to six lanes and add traffic interchange from I-10 to Magee (Pima County)
- Improve Valencia Road to six lanes divided from I-19 to 12th Avenue (Pima County)

Summary: Intermodal Trends and Forecasts for the PAG Region Related to Airport Planning

Several major conclusions can be drawn from these data on intermodal passenger and freight facilities in Pima County:

- PAG and its member jurisdictions are planning major infrastructure investments for highways, roadways, and bicycle facilities that will benefit many of the RASP airports.
- Public transit service in the Tucson area is becoming more and more decentralized, with growing transfer opportunities taking place outside downtown Tucson.
- Public transit service in rural areas of the County is growing and is providing significant transfer opportunities to other modes of transportation.
- Downtown Tucson remains the major transfer point for most major transportation modes, including public transit, intercity bus, and Amtrak intercity rail service.
- The downtown Tucson area is also the major focus for truck and rail intermodal freight activity in the County. Outside of air freight at Tucson International Airport, very little freight activity occurs near the Region's airports.
- Major intermodal opportunities are presented by the potential implementation of an intercity passenger rail service as described in the 1994 ADOT Rail Study.
- Puerto Nuevo provides potential regional, national, and international multi-modal accessibility and intermodal facilities. However, there is no local transportation system planned within the Puerto Nuevo development area. To ensure that the full potential of Puerto Nuevo is achieved, linkages to the regional transportation network will need to be identified.
- The proposed 264-acre Century Park Research Center located off Kolb Road north of Interstate 10 could provide an active Foreign Trade Zone with intermodal implications. Included as part of the plan is a rail spur off of the Union Pacific line that would be designed for effective transfer of freight and container loading and unloading.
- The absence of intermodal facilities near major airports presents opportunities for the creation of an intermodal freight transfer facility near airports located on rail corridors, especially Tucson International Airport and perhaps Marana Northwest Regional Airport.